

DIGITAL DMX

PROGRAMMABLE DIMMING CONSOLE

DIRECTOR PLUS

CX-12

USER MANUAL

VERSION 2.02



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OPERATING DESCRIPTION.....Starting channel operation

A. POWER SUPPLY: 110V~240V AC

B. TURNING POWER ON;

Hardware ac on / off switch on rear panel software; on/off switch on upper right corner of front panel

C. BLANK KEY; check led light on blank key. Cx-12 is operational when when light is <u>off.</u>

D. CHANNEL OPERATION

- 1. Pull down all the fader VR---->to the bottom
- 2. Pull down master fader VR---->to the bottom, then press key below.
- 3. Adjust master faderVR to maxium level.
- 4. Press SC/CH key to enter into channel mode----> LCD shows:

PAGE START CH01

Check if operation is in Channel mode (2 ways);

- 1. LCD screen
- 2. page keys' indication lights: green = channels, red = scene

5. Press page key #1~4, depending on start channel of first fader VR (see below).

6. Page 1,2,3,4 --> page 1: ch01~24---> LCD shows: PAGE START CH01

page 2: ch25~48---> LCD shows: PAGE START CH25 page 3: ch49~72---> LCD shows: PAGE START CH49 page 4: ch73~96---> LCD shows: PAGE START CH73

Example: How to set the level of the following channels; Ch#25----70% Ch#26-----50% Ch#01-----100% (fl) Ch#95-----90% Steps : 1. Press page 2 (ch25~48) ----->LCD:PAGE START CH25 2. Adjust fader VR #1 to 70% (LCD shows channel level) 3. Adjust fader VR #2to 50% (LCD shows channel level) 4. Press page 1 (ch01~24) ----->LCD shows : PAGE START CH01 5. Adjust fader VR #1, and #2 to 0% -bottom (LCD shows channel level) note: ch25 & ch26 will remain unchanged. 6. Adjust fader VR #1 to 100% (fl) 7. Press page 4(ch73~96) ----->LCD: PAGE START CH73 8. Adjust fader VR #1 to 0% 9. Adjust fader VR #23 to 90% (LCD shows channel level) *P.s.* : *if you want to change the level of ch26 to 40%;*

1. Press page 2 (ch25~48) ----->LCD:PAGE START CH25
2. Adjust fader VR #23 to 0%
3. Adjust fader VR #2 to 100%, then down to 40%

TO SET CHANNEL LEVEL TO A SCENE, SEE NEXT PAGE

OPERATING DESCRIPTION..... Creating a scene

- A A scene can only be created through the set of channels. See channel operation, or the following example.
- B. Set the level of channels desired.

C. Save channels to a scene No.

- 1. Press PROG key----->LCD shows: 1.Scene 2. Sequence
- 2. press function key #1(Scene) ----> LCD shows: 1.Load 2.Save 3.Clear 4.More
- 3. Press function key #2 (Save)
- 4. Key in the desired scene No. to be saved (choose from 01~96 on the number keys)
- 5. Press enter. Scene is displayed

Example: Create scene #1 with the following channels

CH1=100%	CH12=100%	CH11=100%
CH12=100%	CH15~18=100%	CH25~30=100%

<u>STEPS</u>

1. Adjust master fader VR to 100%

Make sure the program is in CH mode (see LCD screen), if not press the SC/CH key.

- 2. Press page #1---->LCD shows: PAGE START CH01
- 3. Adjust fader VR #1,2,11,12,15~18 to 100%
- 4. Press page #2---->LCD shows: PAGE START CH25
- 5. Adjust fader VR #1,2,11,15~18 to 0% bottom
- 6. Adjust fader VR #1~6 (CH25~30) to 100%

To save channels' level to scene No.;

- 7 .Press PROG key----> LCD shows:1.Scene 2.Sequence
- 8. Press function key #1(Scene)----> LCD shows :1. Load 2. Save 3. Clear 4. More
- 9. Press function key #2. (Save)--->LCD shows: SAVE SCENE 01
- 10. Press desired scene #..... press key numbers #0 and #1
- 11. Press ENTER. All pevious channels are now saved in scene #1 (sc-1)

12. Continue as described above to create up to 96 scenes.

OPERATING DESCRIPTION...... Operating a scene

Scene can be recalled by:

- a. Using keys to load scene #
- b. Using fader vr to load scene #

A. USING KEYS TO LOAD SCENE

First adjust all faderVR to 0%

- 1. Adjust all channel levels to 0% by adjusting master vr to 0%, then pressing the master key (under the master fader vr)
- 2. Adjust master vr to 100%
- 3. Press PROG key ----->LCD shows: 1. Scene 2. Sequence
- 4. Press function key#1 (Scene)----> LCD shows 1. Load 2. Save

3.Clear 4.More

- 5. Press function key#1 (Load)----> LCD shows; LOAD SCENE 01
- 6. Press number keys #0, and #1
- 7. Press ENTER. Scene #01 is now loaded.

B. USING FADER VR TO LOAD SCENE

- 1. Adjust all channel levels to 0% by adjusting master vr to 0%, then pressing the master key (under the master fader vr)
- 2. Adjust master vr to 100%
- 3. Press SC/CH key. Red light on page key indicates scene mode. (green light indicates channel mode) ----->LCD shows: PAGE START SC01.
- 4. Press PAGE 1 key (faders VR#1~24 = Scenes: SC01~SC24).
- 5. Adjust fader VR #1 to 100%.

OPERATING DESCRIPTION......Setting up a sequence

Setting a sequence provides the operation for both the chaser and the A/B crossfaders.

- A A sequence can be made only when more than two scenes have been set.
- B. Prog----->Scene

---->Sequence ----->Chaser program (for chaser)
 ----->A/B Cross fader

- C. Set scene in advance
- D. Create a sequence with the scenes. Note:Squence programs are used to run chaser program or for the A/B cross fader.
- 1. Press PROG key----->LCD shows: 1. Scene 2. Sequence
- 2. Press Function key #2(Sequence)----->LCD shows: 1. Load 2. Save

3.Edit 4.Clear

- 3. Press function key #3 (Edit) -----> LCD shows : 1.:1 2:+ 3:- 4:E
- 4. LCD also shows : Sequ.Step01=S(scene)00
 - A. Key in a desired scene#, previously saved, to step #01.
 - B. Press ENTER. LCD shows-----> Sequ.Step02=S(scene)00
 - C. Step#2 is now ready to be entered.
 - D. Key in a desired scene#, previously saved, to step #02.
 - E. Press ENTER. LCD shows-----> Sequ.Step03=S(scene)00
 - F. Step#3 is now ready to be entered.
 - G. To end sequence: press function #4(E-end)

Note: there are a total of 64 steps possible

5. To save: indicate a # to the sequence program.

- A. Press PROG----->LCD shows: 1.Load 2.Save 3.Edit 4.Clear
- B. Press function key #2 (Save)
- C. Press a No. (01~24) . Example: No. 04
- D. Press ENTER. The sequence has been stored in No. 04

OPERATING DESCRIPTION.....Operating chase

Recall a sequence program to operate chase

- A. Press CHASER key----->LCD shows: SELECT:F01.....F24
- B. Use No. keys (01~24), to select sequence program.
- C. Press ENTER
- D. Adjust CHASER fader VR to desired level.
- E. Adjust SPEED fader VR to the desired level. Note: If level is at 0%, then speed is automatically controlled by audio.
- P.S. To stop chaser operatoion:
 - 1. Adjust CHASER fader VR to 0%
 - 2. Press CHASER key twice.

OPERATING DESCRIPTION...... A/B cross faders

Each cross fader, A and B, can be operated independently.

Each cross fader can operate up to 24 sequences, each with a Total of 64 steps.

(The sequence programs can be loaded by pressing fader VR keys' #1~24 or keying in the number with the No. keys.)

A. Setting speed of fading effect

1. The time of fade in & out of cross fader A or B is controlled by SPEED fader VR.

First: Adjust speed fader VR to desired speed level Second: Press SPEED key to save speed level. Note: Speed will not change until SPEED key is pressed again.

B. Manual operation of fading through each step in a sequence program

- 1. Press PROG key-----→LCD shows: 1. Scene 2. Sequence
- 2. Press Function key #2(Sequence)-----→ LCD Shows: 1. Load 2. Save

3.Edit 4. Clear

- 3. Press function key #1(Load).
- 4. Hold both cross fader"A"key (or "B" key) and desired program key # Example : Press Cross fader "A", and fader key #1(PAGE 1) Crossfader "A" will follow P01 (Program 01).

Note: Every step is a scene previously saved in that program.

- 5. As cross fader "A" is adjusted to the top position, the brightness of step 01 increase until maximum level at speed rate previously set.
- 6. Slowly adjust cross fader "A" to lowest position. At this time, step 01 faders out, while step 02 fades in.
- 7. Continue as above through each step.
- 8. When all steps have been completed, program automatically restarts with step #1.

B. Button operation

- 1~3 see steps #1~3 mentioned above in "manual operation".
- 4. Hold both "A" key (or "B" key) and CH1 key. Crossfader "A" will follow P01 (program 01).
- 5. Adjust cross fader VR to the top position.
- 6. Press the fader VR's key to fade through each step at the speed previosly set.
- 7. Continue as above through each step. Note: To clear "cross fading" operation;

- 1. Adjust the cross faders VR to the lowest position.
- 2. Press cross fader VR key(s) Output value is at 0%, and operation is at the beginning of the next step.

MAIN FUNCTIONS

- 96 CONTROL CHANNELS / 512 PATCH OUTPUT
- 96 PROGRAMMING SCENES
- 24 PROGRAMS FOR CHASING AND CROSS FADER
- EACH PROGRAM FILE CAN BE PROGRAMMED UP TO 64 STEPS Each step corresponds to a certain scene
- STORES DATA TO EXTERNAL MEMORY (Optional)
- READS AND WRITES DATA IN CONNECTION WITH EXTERNAL MEMORY
- TESTING AND LOCKING ABILITY
- 2 INDEPENDENT CROSS FADERS "A" AND "B"

SETUP OPERATION FLOW CHART

SETUP KEY 1:set up 1:lcd 1:back1 Turns on / off Icd backlight 2:concen Sets lcd concentration 2:timer 3: 4:test for servicing 2:xio (Memory extension) 1:read Reads data from external memory 2:save Writes data to external memory 3:Patch 1:page 2:dmx out 1:1 2:+ 3:- 4:= + = SEE NEXT STEPdimmer001<=CH01 - = BACK 1 STEPE = END, LAST STEPENTER 3:dmx in Clears dmx input buffer 4:warm up 1:clear background=S00 Sets background data 4:Lock 1:pgm program lock, 2:key Limited to individual sfider operation. Can not change page.

NOTE: PRESS "SETUP" KEY TO RETURN TO PREVIOUS PAGE

PROGRAMMING OPERATION FLOW CHART



NOTE: PRESS "PROGRAM" KEY TO RETURN TO PREVIOUS DISPLAY

2:program See following page for continuation of programming flow chart

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FRONT / REAR PANEL DESCRIPTION

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FRONT / REAR PANEL DESCRIPTION

- [1] FADER VR #1~24
- [2] FADER VR #1~24 KEYS (2 Functions)
 - A) Flash: individual channel (in Channel mode)
 - B) Program select (in prog mode) / Scene select (in scene mode)

Note: must push 2x to enter

- [3] DESCRIPTION SPACE (for user to write in)
- [4] SPEED SLIDER CONTROLLER WITH SELECTION KEY Note: At lowest level, switches to audio
- [5] CHASER FADER VR WITH SELECTION KEY
- [6] FADE "A" FADER VR WITH SELECTION KEY
- [7] FADE "B" FADER VR WITH SELECTION KEY
- [8] PAGE SELECTION KEY
- [9] LAMP CONNECTOR (DC +12V 250mA)
- [10] POWER SWITCH
- [**11**] BLANK SWITCH
- [12] LCD DISPLAY
- [**13**] MASTER FADER VR
- [**14**] BUMP KEY
- [15] FUNCTION KEYS: F1 ~F4
- [16] SET-UP FUNCTION KEY
- [17] PROGRAM KEY
- [18] CHASER KEY 24 CHASING PROGRAMS Note: turns off by double click of key button
- [**19**] SCENE/ CHANNEL KEY Note Changes modes: channel <---> scene

[20] ENTER KEY

- [21] KEY NUMBERS: 0~9
- [22] CLEAR KEY
- [23] EPROM door
 - Open only to install updated EPROM chip

- [24] MAIN POWER SWITCH
- [**25**] POWER FUSE (.5A)
- [**26**] AC INPUT
 - Accepts automatically 100~240V 60/50 Hz
- [**27**] LAMP POWER SWITCH
- [28] DMX 512 INPUT
- [**29**] DMX 512 OUTPUT
- [30] ANALOG OUTPUT; 1~10V DC (1~24 CH)
- [31] EXTENDED MEMORY INPUT
- [32] AUDIO INPUT 100mV

SYSTEM CONFIGURATION



SPECIFICATIONS

POWER SUPPLY	100~240V / 50~60Hz / 0.5A	
ANALOG OUTPUT VOLTAGE	0~10V DC	
ANALOG OUTPUT CHANNELS		
	PIN 1~24: CH1~24 / PIN 25: GND	
ANALOG CONNECTOR	DB25	
DMX OUTPUT/INPUT	DMX 512 / 1990 protocol	
DMX OUTPUT CHANNELS		
DMX CONNECTORS	XLR 5-Pin (male and female)	
AUDIO SIGNAL LEVEL INPUT	Internal microphone (A.G.C.)	
	External: 200mV	
LAMP CONNECTOR	XLR 3-PIN, DC +25V 250mA	
MEMORY CAPACITY		
DIMENSION	19" 6U Standard rack size	
	482mm (w) x 355mm(h) x 125mm(d)	

MAINTENANCE

- Guarantee is void if improperly connected.
- Internal repairs to be done by a professional technician.

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